DOCUMENT RESUME

ED 097 840 HE 005 996

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TITLE Factors Affecting Freshmen Enrollment at Arkansas State University. Fall 1973.
INSTITUTION Arkansas State Univ., Jonesboro.
PUB DATE 73
NOTE 28p.

EDRS PRICE MF-$0.75 HC-$1.85 PLUS POSTAGE
DESCRIPTORS *Enrollment; *Enrollment Influences; *Grade Point Average; *Higher Education; Questionnaires; *Student Characteristics; Surveys
IDENTIFIERS *Arkansas State University

ABSTRACT

The purpose of this study was to determine the reasons why students did not enroll at Arkansas State University in the fall semester of 1973 when they had listed the university as their first choice among institutions to attend. An equally important purpose was to determine whether or not there were differences in the personal and intellectual characteristics of enrolled and nonenrolled groups and to develop a predictive model which would provide administrators with a definitive tool for identifying the potentially nonenrolling student. The following conclusions were drawn from the study: (1) The high school grade point average for nonenrolled students was significantly lower than the high school grade point average for enrolled students, (2) Family income was higher for enrolled students. (3) Advice of parents, size of college, and a desirable location were more important considerations for the enrolled group. (4) Information given by the high school counselor, an offer of a scholarship or other financial aid, and a good athletic program were significantly more important to those who did not enroll. The survey questionnaire is included in the appendix. (Author/PG)

FACTORS AFFECTING FRESHMEN ENROLLMENT

AT

ARKANSAS STATE UNIVERSITY

FALL 1973

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INTRODUCTION

At a time when enrollments in higher educational institutions have begun to plateau and when much of the long range planning of the early and mid-1960's seems to have been too optimistic, administrators must analyze practices, events, and policies more carefully than the boom years permitted or required. As enrollments level or decline, higher educational institutions have a responsibility to ensure that none of those who could profit from post-secondary training fail to take advantage of the opportunity to do so. Recruitment programs must seek capable students and universities must find ways to attract and assist them. Society can ill afford to underdevelop the talents of its most important resource.

Most institutions require some nationally recognized test as a condition for admission. These tests are ordinarily taken during the junior or senior year of high school and the results are made available to the interested colleges. The literature indicates that a significant number of those high school students who plan to attend a given college never actually matriculate and little or no definitive data is available to suggest reasons for non-enrollment.

Arkansas State University has required freshmen and transfer students to submit American College Test (ACT) results since the fall semester of 1970. One of the services rendered institutions by ACT is the class profile of those students who gave the college or university as their first, second, or third choice among institutions which they hoped to attend. Of the students who listed Arkansas State University as their first choice, approximately one-half failed to enroll during the fall semester following the year when they sat for the examination. This disturbing statistic provided the stimulus for this study.

PURPOSE OF THE STUDY

The purpose of this study was to determine the reasons why students did not enroll at Arkansas State University in the fall semester of 1973 when they had listed the University as their first choice among institutions to attend. An equally important purpose was to determine whether or not there were differences in the personal and intellectual characteristics of the enrolled and the non-enrolled groups and to develop a predictive model which would provide administrators with a definitive tool for identifying the potentially non-enrolling student.

LIMITATIONS OF THE STUDY

The study was limited to the 1972-73 ACT examinees who had listed Arkansas State University as their first choice among institutions to attend.

METHODS AND PROCEDURES

Description of the Sample

The American College Testing Service provided Arkansas State University with a magnetic tape record of each person who listed the University as their first, second, or third choice. This tape was matched against the fall enrollment tape and two groups of subjects were identified. The first group consisted of those students who had taken the ACT in 1972-73 and who were currently enrolled in the University. The second group consisted of those prospective students who had taken the ACT in 1972-73 but who were not currently enrolled. Those students who had listed the University as a second or third choice were purged from both groups of subjects leaving only those who had given ASU as a first choice. It was assumed that the

listing of an institution as a first choice represented a considered choice while a listing of a second or third choice would be undertaken with less committment.

Those students who did not enter also served as a sample of the second phase of the study. This phase was directed toward a determination of the specific reasons why the student did not actually enroll.

Description of the Variables

The number of variables which could be studied was large. From this pool 36 were selected for analysis. Most were readily available from the ACT tape and others were generated by the analysis.

Ten variables representing the program of study that each student planned to enter were obtained from the ACT tape. Each field was reduced to a dichotomous variable with a "1" indicating that the student planned to enroll in that field and a "0" indicating that the student did not plan to enroll in that field.

Five variables representing the English, mathematics, social studies, natural science, and composite scores earned on the ACT test were obtained from the ACT tape and used as continuous variables without adjustment.

Sex was treated as a dichotomous variable while high school grade point average was treated as a continuous variable.

Sixteen variables representing factors which were considered by the student in choosing a college were obtained from the ACT tape and reduced to dichotomies with a "1" indicating that a given factor was a major consideration in their decision while a "0" represented a minor consideration or no consideration in the choice of a college. These variables were drawn from a wide variety of influential factors in the choice of colleges

including the advice of parents, teachers, counselors, distance from the college, family background, athletics, and scholastic programs available.

The four remaining variables represented the probability of earning at least a grade of "C" on college work, family income, the number of months between the time the ACT test was taken and the fall semester registration date, and the distance in miles from the University.

Data Analysis Plan

Arkansas State University's IBM 360/30 Computing System was used to verify and analyze the data Data representing the variables were obtained from the ACT tape and the fall semester registration tape. These data were punched into tabulating cards, and group membership with respect to enrollment, non-enrollment was identified.

The data were treated by multiple discriminant analysis. All statistical analyses were performed on Arkansas State University's IBM 360/30 Computing System operating under the control of program DISCRIM. DISCRIM is a statistical package consisting of a main line program and ten subprograms. Veldman's (1967) modifications of Cooley and Lohnes' (1962) procedures were adapted by the authors to the requirements of the ASU system.

Multiple discriminant analysis is a statistical technique that may be conceptualized as an extension of single-classification analysis of variance whereby a group of dependent variables may be included simultaneously. It differs from regression analysis in that multiple criterion variables representing group membership are utilized rather than a single criterion. This analytical technique permits the user to determine the manner and extent which two or more groups may be differentiated by a set of dependent variables operating together. The dependent variables were reduced to a

set of discriminant or composite scores In this study, two groups of subjects, those who enrolled and those who failed to enroll, were represented along a single dimension Each groups' discriminant scores were maximally differentiated Analysis of each variable in the set by means of the univariate F-test permits the user to determine the degree to which a given variable contributes to the discrimination A statistical test, Wilks Lambda, was employed to determine the extent to which the differentiation of the groups would be likely by chance alone

The thirty-six variables were treated with the technique described and a number of statistical results were obtained Those results which were directed toward the study purposes were selected for presentation.

The data analysis plan for the second phase required that each non-enrolled student receive a questionnaire requesting reasons for non-enrollment. Address labels and control lists were generated as a by-product of the computer runs which identified the groups. Frequency counts and percentages were employed to analyze results from the questionnaires.

PRESENTATION AND ANALYSIS OF THE RESULTS

Phase I

The hypothesis which provided the structural framework for the study was that background, achievement, and socio-economic circumstances were significantly different between students enrolled in the University and those who failed to enroll although both had listed the University as their first choice among institutions to attend

All statistical tests of the dependent variables and the discriminant functions were conducted using the 05 level of significance. It should be noted, however, that tests of significance are importants tools of a

researcher but they do not relieve an investigator of the obligation to support his findings with reason as well as fact. The authors were particularly concerned with practical results as well as statistical significance. Since the samples were extremely large, substantially inflated probabilities were likely without actually providing practical results.

Means for each group and the results of the univariate F-tests for each variable were presented in Table Means for the non-enrolled group were obtained from data representing 772 observations while 822 observations provided scores for the enrolled group. Thus, the non-enrolled group represented 48.43 percent of all students who wrote the ACT examination and gave Arkansas State University as first choice among institutions to attend while the enrolled group represented 51.56 percent. The univariate F-test results represented the ratio of the non-enrolled variances on each variable to the variance of the enrolled group. Probabilities of the random occurrences of F-ratios with 1 and 1592 degrees of freedom were computed on each variable using a routine adapted from Veldman (1967) and based upon earlier work by Kelley (1947) and Kendall (1955).

Variables one through nine were measurements of student choices concerning the program of study that students planned to enter. More than 100 fields could be selected but these were collapsed to nine broad categories and then each category was reduced to a dichotomy. Since these nine were dichotomous, the means represented the percent of each group who selected that field as the one they planned to enter. For example, 17.23 percent of the group who did not enroll planned to enter some education field while 15.57 percent of the enrolled group planned to enter that field. Students who had not decided upon a field of study were permitted to indicate their indecision when they sat for the ACT exam.

TABLE I

MEANS AND UNIVARIATE F-TEST RESULTS
FOR THE THIRTY-SIX VARIABLES

No.	VARIABLE NAME	MEANS NON ENROLLED	MEANS ENROLLED	UNIVARIATE F-TEST* F-RATIO	PROB.
1	Education Fields	.1723	.1557	.7975	.6245
2	Social Science & Religious Fields	.0738	.0608	1.0750	.3004
3	Business, Political, and Persuasive Fields	.2176	.2178	.0005	.9795
4	Scientific Fields	.0376	.0401	.0709	.7864
5	Agriculture & Forestry Fields	.0415	.0450	.1218	.7274
6	Health Fields	.1762	.1837	.1534	.6978
7	Arts and Humanities Fields	.1166	.1472	3.2528	.0678
8	Engineering Fields	.0246	.0292	.3186	.5796
9	Trade, Industrial, and Technical Fields	.0453	.0268	3.9877	.0432*
10	ACT English Score	17.1023	17.9696	12.2380	.0008*
11	ACT Mathematics Score	16.8005	17.3905	3.3551	.0636
12	ACT Social Studies Score	16.3225	17.5632	12.3471	.0008*
13	ACT Natural Science Studies	18.7111	19.5766	9.3941	.0026*
14	ACT Composite Score	17.3640	18.2494	12.3426	.0008*
15	Sex	.4767	.4781	.0029	.9557
16	High School Grade Point Average	2.6934	2.8081	9.3124	.0027*
17	Advice of Parents	.6373	.6971	6.2874	.0118*
18	Information Given by High School Teachers	.3471	.3613	.3342	.5705
19	Information Given by High School Counselors	.4158	.3394	9.4837	.0025*
20	Talk with Admissions Counselor Of College	.1813	.1533	2.0624	.1472

TABLE I (cont)

MEANS AND UNIVARIATE F-TEST RESULTS
FOR THE THIRTY-SIX VARIABLES

No.	VARIABLE NAME	MEANS NON ENROLLED	MEANS ENROLLED	UNIVARIATE F-TEST* F-RATIO	PROB
21	Campus Visit or Tour	.5013	5122	1772	.6775
22	Offer of Scholarship Or other Financial Aid	.3744	.3078	7.3786	.0068*
23	Good Faculty	.5609	.5633	.0219	.8771
24	Good Scholastic Standards	.5207	.4866	1.7216	.1864
25	Desirable Social Climate And Activities Program	.6308	5998	1.5661	.2082
26	Size of College	.4922	.5487	4.9313	.0249*
27	Desirable Location	7500	.8418	19.7935	.0001*
28	Special Curriculum I Wanted	.5687	.5487	.6136	5604
29	Low-cost College	.3679	.3431	1.0139	.3151
30	Good Athletic Program	.2681	.1667	22.6758	.0000*
31	Coeducational College	.3018	.2664	2.2668	.1283
32	Desirable Intellectual Atmosphere	5233	.4878	1.7964	.1769
33	Probability of Earning "C" Or Above	4956	.5357	7.2670	0071*
34	Family Income	4.9534	5.1971	2.4273	.1153
35	Months Between ACT Test And Fall Semester	8.2642	7.7421	17.2357	.0001*
36	Distance from University	9.5803	11.1886	145.8264	.0000*

* Degrees of Freedom Between = 1, Degrees of Freedom Within = 1592

The variable for undecided was not included in the discriminant analysis since its inclusion rendered the model redundant. Nevertheless, 9.46 percent of the non-enrolled group was undecided while 9.37 percent of the enrolled group indicated that they had not definitely chosen the field that they planned to enter. No significant difference existed between the two groups on this variable. Univariate F-tests on these nine variables failed to uncover significant differences with one exception. Non-enrolled students tended to be more interested in trades and/or technical fields than the enrolled students. This suggested that those students who were interested in a trade or technical education ultimately decided that the University was not the best place for them to acquire those skills and perhaps entered the job market or attended a technical school. None of the remaining eight was significant and only variable seven tended toward significance. When viewed as a whole, students were not differentiated with respect to the field of study they planned to enter.

Variables 10 through 14 were the subject matter and composite scores earned by the students at the time they wrote the American College Test. The mean score on each area test and the composite was larger for the enrolled group than for the non-enrolled group. All of the differences were significant with the exception of the ACT mathematics score. It was interesting to note the similarity of the actual differences on three of the scales. These results pointed to the conclusion that students who actually enrolled in the University in the fall of 1973 had significantly stronger achievement as measured by the ACT scores than their counterparts who did not enroll. Although the non-enrolled group means were significantly lower than those who enrolled, a substantial number of the non-enrolled

group scored well on the examination. Approximately 45 percent of those who did not enroll scored at or above a score of 18. The score of 18 ordinarily indicates the ability to succeed academically at Arkansas State University.

Sex was treated as a dichotomy with a "1" representing males while a "0" represented females. Since means of a dichotomous variable represented percentages, Variable 15 in the Table indicated that 47.67 percent of those who did not enroll were male. There was no significant difference in the two proportions and sex was not a differentiating factor in predicting whether or not a prospective student would actually enroll.

High school grade point average, Variable 16, was a significant factor in predicting group membership. The mean grade point average for the non-enrolled group was 2.634 while the enrolled group had a high school grade point average of 2.8081. A difference of this magnitude would be expected to occur randomly only twenty-seven times in ten thousand replications. The conclusion was drawn that the higher the high school grade point average, the more likely the student was to enroll at the University. Nevertheless, an examination of distribution statistics revealed that approximately 45 percent of the non-enrolled students had a high school record equal to the average of the enrolled group.

Sixteen variables representing factors associated with a student's selection of a college were obtained from responses reported by examinees at the time they wrote the ACT. These variables were treated as dichotomies in that a given factor was scored as "1" if that factor was a major consideration in college choice or a "0" if that factor was of little or no consideration. Univariate F-test results revealed significantly different opinions between the two groups on six of the sixteen choice factors.

Advice of parents, Variable 17, was a major factor in college choice for 63.73 percent of those who did not enroll while it was considered a major factor by 69 71 percent of those who did enroll. While both groups reported high percentages on this factor, the group of students who actually enrolled indicated a significantly greater emphasis.

Variable 19, information given by the high school counselor, was a major consideration in college choice for 41.58 percent of those who did not enroll while it was important to only 33.94 percent of those who did enroll. If this factor was important to a prospective student, he tended not to enroll at Arkansas State University, although he had given the University as first choice among institutions to attend.

The offer of a scholarship or some other form of financial aid was important in the selection of a college to 37.44 percent of the non-enrolled group while it was important to 30.78 percent of the enrolled group. The difference in perceptions of importance was significant and suggested that some of those who did not enter either were unable to obtain aid at the University, were offered aid at some other institution, or were not informed of the availability of assistance.

The size of a college was a major factor in college selection for 49.22 percent of the non-enrolled while it was important to 54.87 percent of the enrolled group. Unfortunately, this measurement did not specify whether a small or large college was important, merely that size was a factor. It was concluded that if size of a college was important to a student, he was more likely to enroll at ASU than the student who felt that size was of little or no consideration in college choice.

A desirable location was deemed important by 75.00 percent of the non-enrolled group and by 84.18 percent of the enrolled group. This factor was

the most important consideration for both groups. It was, however, significantly more important to the enrolled group. An unfortunate restriction in the use of this variable for predicting group membership occurred when both groups reported large proportions thus reducing variability and effectiveness as a predictor.

The variable which reflected the greatest difference of opinion was a good athletic program, Variable 30. A relatively small percent of both groups perceived this factor as a major consideration, but those students who failed to enter felt much more strongly about the importance of a good athletic program. No other variable representing college choice factors was so markedly different. The conclusion was drawn that if a good athletic program mattered to a prospective student, he was more likely not to enroll.

The probability of earning a "C" or better grade was computed using ACT scores, ASU grading practices, and prior records. Probabilities were expressed as chances in 100 of earning a "C" or better. The enrolled group had a significantly higher probability of a "C" than the non-enrolled group although the mean probability for those who did not attend indicated that a substantial number could have been successful academically.

Family income was grouped into seven categories representing an income range from under $5,000 to $20,000 and over. There was no significant difference in the income level although the enrolled group tended to come from families with slightly higher incomes.

Variable 35 represented a measurement of the number of months between the time the ACT examination was written and the fall registration at Arkansas State University. The test results were significant at the .0001 level and the means indicated that the greater time differential was in the non-enrolled group. Thus, the earlier the test was taken, the less likely the student was to enroll.

Since location had been shown to be an important factor in college choice, the actual distance that each subject lived from the University was categorized and assigned a number inversely proportioned to the distance. The largest numbers were given to students who graduated from a high school in Craighead County, the University's location, smaller numbers to students from contiguous counties, then still smaller numbers to those from Northeast Arkansas counties. Successively smaller numbers were assigned to students from the remainder of Arkansas counties, Missouri, all other contiguous states, and, finally, all other addresses.

The univariate F-test results revealed that this variable represented the greatest differentiation and indicated that the nearness of the University was a greater consideration in college choice than any other factor. The multivariate treatment did not result in a finding that would permit generalization of the distance variable but it did suggest that students look just to the nearby institutions when mitigating circumstances exist.

Fifteen of the thirty-six variables produced significantly different results between the enrolled and non-enrolled groups. Those variables which measured achievement tended to reveal higher scores for those who enrolled. A less consistent pattern of measurement was disclosed by those variables which indicated college choice factors. It was apparent, however, that factors did exist which differentiated the groups and the knowledge of these factors could be used by the University to improve student recruiting. Although some of the college choice variables were not significant differentiators, the proportion of both groups responding positively to them reflected an importance which should not be overlooked in future planning for student attraction. The time lag between the ACT test and fall registration was a significant differentiator and should be recognized in the

number and kinds of follow-up efforts of the University's recruiting staff. The distance factor was the single most powerful discriminator. While nothing can be done to change this condition, concentrated effort toward enrolling a higher proportion of those who live within the University's service area would be warranted.

Multiple discriminant analysis permits the user to obtain an equation which can be tested for its significance and then use that equation in predicting group membership. Since this study used only two groups, one reference axis was necessary to represent group differences. The discriminant results with all variables in the analysis were disclosed in Table II. A Wilks Lambda of .867 with 36 and 1557 degrees of freedom would be expected to occur randomly less than one time in ten thousand replications. The centroids reported reflect the mean of the discriminant functions. The

TABLE II

MULTIPLE DISCRIMINANT ANALYSIS RESULTS FOR THIRTY-SIX VARIABLES FOR TWO GROUPS (NON-ENROLLED AND ENROLLED)

STATISTIC	RESULT
Wilks Lambda	.867
Degrees of Freedom = 36. and 1557.	
F-Ratio	6.618
Probability	> .0000
Non-Enrolled Centroid	2.5363
Enrolled Centroid	3.0678

discriminant scores represented the maximum differentiation that could be obtained, therefore, the centroids provided an indication of the magnitude of group differences.

In order to obtain an objective evaluation of the usefulness of the discriminant weights in predicting whether or not future examinees would enroll at Arkansas State University, it was necessary to determine the degree of separation that existed between the two groups. These results were presented in Table III. Note that the means of the two distributions of discriminant scores represented the centroids obtained in the multiple discriminant analysis tests. Tests for skewness indicated near symmetric distributions with the enrolled group slightly more positively skewed than the non-enrolled group. Tests for kurtosis reflected important differences. The non-enrolled group tended to be more peaked indicating a concentration of scores near the centroid. The distribution of scores for the enrolled group indicated an extremely flat distribution with scores widely spread.

TABLE III

DISCRIMINATE FUNCTIONS DISTRIBUTION STATISTICS FOR NON-ENROLLED AND ENROLLED GROUPS

	NON-ENROLLED	ENROLLED
Means	2.5362	3.0677
Standard Deviation	.6894	.6697
Skewness	.1535	.8226
Probability (Skewness)	.8727	.5839
Kurtosis	1.9095	-3.0180
Probability (Kurtosis)	.0533	.0030

When the scores were examined for range, median, and percentile points, it was apparent that the two distributions tended to be too nearly alike to permit generalized use of the predictive equation

In summary, the analysis pointed up some rather interesting differences between those students who took the ACT and enrolled and those who did not enroll. It was disappointing that a model could not be developed that would satisfactorily predict group membership. Nevertheless, the results were useful in identifying factors which were important to college choice and which hold the promise to uncover other indicators that will permit more successful prediction.

Phase II

Each of the 772 members of the non-enrolled group received a questionnaire which was designed to obtain the reason(s) why they elected not to attend the University after having indicated on the ACT that they planned to enroll and what, if anything, the University could have done which would have persuaded them to enter. Appendix A contains the single page questionnaire. The response rate to the questionnaire was somewhat disappointing. Nevertheless, the number who responded represented 39.37 percent of those sampled. While this return was not sufficiently large to permit detailed generalities, it was deemed substantial enough to use in a restricted sense. The reader is cautioned to consider these results in light of the response rate.

The first data element on the questionnaire sought to obtain information indicating whether or not the subject had decided to attend another college, university, vocational technical school, or some other post-secondary educational institution. Of the 303 who responded to this question, 54.12 percent said that they were then enrolled in some form

of post-secondary training. This number seemed to be especially large when one considers that all these subjects had given Arkansas State University as their first choice among institutions to attend. An examination of the University's enrollment record seemed to indicate that this University did not attract those students who listed ASU as a second or third choice in the same percentage as the number who went elsewhere. Statewide data were inconclusive in this dimension but it did seem fair to say that the listing of the University as a first choice was rather conditional and that other factors such as financial aid, the choice of friends, location of school, and a wide variety of related concerns impinge on the final decision about college enrollment. The colleges and universities attended by these subjects were disclosed in Table IV. There were 19 in-state schools represented while all out-of-state schools were aggregated. These data indicated that the largest percent of students attended an out-of-state school while a substantial percentage attended one in-state institution. It was somewhat surprising to observe the relatively small percentage who elected to attend a vocational-technical school. It was possible that the response pattern did not accurately reflect these total percentages but the influence of vocational-technical schools on enrollment was not as great as might have been expected.

If a subject indicated that he was attending another school, he was asked why he chose that particular institution. These data were presented in Table V and were consistent with the college choice factors identified in phase I of the study. The offer of financial aid and the location of the institution were extremely significant factors in college choice when both groups were treated by multivariate analysis and similar results were obtained from those subjects who elected to attend school elsewhere.

TABLE IV

PERCENT OF STUDENTS ATTENDING
ANOTHER POST-SECONDARY INSTITUTION

INSTITUTION	PERCENTAGE
Arkansas College	3.37
Arkansas State University, Beebe	4.05
Arkansas Polytechnic College	1.35
College of the Ozarks	2.02
Crowley's Ridge Junior College	2.02
Henderson State College	6.08
Hendrix	2.02
Ouachita Baptist University	4.05
Philander Smith College	.67
Phillips County College	.67
School of Radiologic Technology	1.35
Southern State College	2.02
Southern Baptist College	5.40
State College of Arkansas	14.18
University of Arkansas, Fayetteville	8.78
University of Arkansas, Little Rock	5.40
University of Arkansas, Monticello	2.02
University of Arkansas, Pine Bluff	.67
All Vo-Tech Schools	5.40
All Out-of-State Schools	28.37

TABLE V

REASONS GIVEN FOR ATTENDING ANOTHER POST-SECONDARY INSTITUTION

REASON	PERCENTAGE
Athletics (offered a scholarship, etc.)	7.59
Christian College	4.43
Financial Aid	20.88
Location	28.48
More Impressed with School	14.55
Offered Field of Study	18.35
Parental Preference	.63
Personal Reasons	5.06

Subjects who were not enrolled in some post-secondary educational institution were asked to indicate what they were doing. These results were reflected in Table VI. There were 146 subjects responding to the question and a significant proportion were still in high school. High School juniors were permitted to take the ACT, and they were included in the sample although they were not able to enter the University.

The largest percentage of the respondents were employed on a rather permanent basis. When the percentage working and married were added, it was apparent that almost 70 percent of the subjects had elected to assume occupational and personal responsibilities rather than defer them until after college.

Each of the subjects who were not attending a post-secondary school was asked whether or not they expected to enter an educational institution

TABLE VI

ACTIVITIES OF SUBJECTS WHO DID NOT ATTEND
A COLLEGE OR UNIVERSITY

ACTIVITY	PERCENTAGE
Awaiting Placement in Vo-Tech School	.68
Attending High School	19.86
Job	57.53
Marriage	11.64
Personal	2.73
Unemployed	4.78
Military Service	2.73

within the near future. The results were reflected in Table VII. There were 97 respondents who indicated that they expected to continue their education within the near future and 29 who did not plan to continue. Thus, approximately 77 percent felt that they would attend.

Respondents were asked to indicate the institution that they would attend when they did elect to continue their education. Since each had originally listed Arkansas State University as their first choice, it was not surprising to learn that the University was most frequently chosen. Perhaps the most disturbing aspect of these results lies with the rather large percentage who believe that they will enter college when most research indicates that a much smaller percentage continue after having missed a year or more.

TABLE VII

PERCENTAGE OF SUBJECTS INDICATING
FUTURE COLLEGE CHOICE

INSTITUTION	PERCENTAGE
Arkansas State University, Jonesboro	68.81
Henderson State College	1.07
Hendrix	1.07
Medical School	1.07
Missionary Baptist Seminary	1.07
State College of Arkansas	1.07
University of Arkansas, Fayetteville	4.30
University of Arkansas, Little Rock	3.22
University of Arkansas, Pine Bluff	1.07
Vocational-Technical Schools	8.60
Out-of-State Schools	8.60

The final question was included to obtain responses which would tell the University what could have been done that would have resulted in their enrolling as they had initially indicated. Replies to this question were received from 250 of the respondents which represented almost 83 percent of the total. These data were displayed in Table VIII and revealed responses not unlike findings already reported.

The largest percentage felt that the reason they did not attend was not a matter which the University could correct. The percent who felt that more financial aid should have been available was surprising. The

TABLE VIII

ACTIONS A S. U. COULD HAVE TAKEN THAT WOULD HAVE ENCOURAGED ENROLLMENT

ACTIONS	PERCENTAGES
Athletics (offer a scholarship, etc.)	5.20
Location of School was Unsatisfactory	7.60
Got Married	2.80
Another School was More Impressive	8.00
Offer More Financial Aid	21.60
Open Nursing Program	6.00
Offer Field I Wanted	6.40
Schedule and Work Conflict	2.40
No Fault of Arkansas State University	40.00

University has provided financial assistance to each student who established need. The conclusion was drawn that these students either did not explore the opportunities completely or that they were unable to establish need as defined by federal financial assistance guidelines.

SUMMARY

The purposes of this study were to determine the reason(s) why prospective students who had listed the University as first choice among institutions to attend failed to enter and to construct a predictive equation that would permit reasonably accurate estimations of the probability of attending college. All students who wrote the ACT examination in the 1972-73 year and listed Arkansas State University as first choice were considered a part of the study. This number was divided into two groups. The non-enrolled group consisted of those examinees who failed to enter while the enrolled group was made up of examinees who actually matriculated in the fall of 1973.

Thirty-six variables were identified as rationally related to the independent dimension of attendance. These were reduced to tabulating cards and statistically analyzed by means of the University's IBM 360/30 operating under control of the multiple discriminat analysis routine. Univariate F-tests revealed fifteen significantly different variables. The resulting equation was analyzed by means of the Wilks Lambda and F-test for significance of group differentiation. The results were significant beyond the .05 level Further analyses of the discriminant distribution revealed a considerable degree of overlap thus rendering the model somewhat unsatisfactory as a predictor tool.

The non-enrolled group were each sent questionnaires requesting information with respect to the reasons why they did not attend the University and some indication of their current activities. The response rate was approximately 40 percent. Patterns of response tended to confirm the statistical findings thus suggesting the viability of discriminant analysis as a technique for predicting the probability on non-enrollment.

CONCLUSIONS

The following conclusions were drawn from the study:

1. The choice of a field of study does not appear to be related to the likelihood of non-enrollment. A single exception occurred with respect to those students who were interested in trades and technical fields. Those who did not enroll tended to be disproportionately interested in these fields and the fact of non-enrollment would be consistent since Arkansas State University offers few programs in these areas designed to prepare students in a trade or technical area.

2. The enrolled students scored significantly higher on each section of the ACT except in the subject area of mathematics where the difference in the groups did not reach a statistically significant proportion. In the subject areas of English and social studies and the overall composite, differences were large enough to be expected at random only eight times in 10,000 replications. It was realistic to conclude that students with higher achievement scores tended to enroll. Unfortunately, a rather substantial number who did not enroll had scores above the average ACT score for enrolled students.

3. The high school grade point average for non-enrolled students was significantly lower than the high school grade point average for enrolled students. The enrolled students had a much better chance to earn a "C" or better in college work. Thus, the ACT results, high school grade point average, and the prospects of a "C" or better, indicate the more academically talented student was electing to enroll. Nevertheless, the large number of non-enrolled who were capable of college level work was disappointing.

4. Six factors which had a bearing on college choice were regarded in significantly different proportions by the two groups. Advice of parents, size of college, and a desirable location were more important considerations for the enrolled group. Information given by the high school counselor, an offer of a scholarship or other financial aid, and a good athletic program were significantly more important to those who did not enroll. It appeared obvious that if the factors just mentioned were important to a prospective student, he would likely not enroll. Moreover it indicated the areas in which the University needs to concentrate its recruiting program.

5. Family income was higher for enrolled students. Since non-enrolled students tended to have smaller family incomes and valued the offer of a scholarship or other financial aid more than enrolled students, it was concluded that a number of prospective students would have attended had they been able to secure assistance from the University. Students were either unaware of the assistance programs available, they could not establish need, or the administrative processes discouraged them from applying. The University assistance programs follow federal guidelines and all students who can establish need receive assistance. A thorough examination of the University assistance programs, policies, and procedure is warranted in view of the emphasis consistently reported throughout this study.

6. The longer the time interval between the time the ACT test is taken and registration, the less likely a prospective student is to enroll. The University information program must continue its

services to these early examinees if they are to maintain their interest in Arkansas State University.

It was apparent to the authors that a substantial number of considerations impinged upon enrollment and that it is within the power of the University to provide additional services and assistance which can result in the enrollment of a substantial number of potentially non-enrolling students.

APPENDIX A

ARKANSAS STATE UNIVERSITY
ACT FOLLOW-UP
Fall 1973

Our records indicate that you took the ACT examination in 1972-73. At that time you listed Arkansas State University as your first choice among institutions which you had considered attending. We find that you did not enroll at Arkansas State University, and because we are interested in serving the educational needs of the people we would appreciate your taking a few minutes to answer the questions below. Thank you for your assistance in making Arkansas State University more able to serve the needs of the students.

1. Are you attending a university, college, vocational technical school or some other educational institution? Yes_____ No_____
   a. If yes, which institution? Name_____
      Location_____
   b. Would you briefly state why you chose this institution?_____
      _____

2. If you are not attending an educational institution at this time,
   a. What are you doing?_____
      _____
   b. Do you expect to enter an educational institution within the near future? Yes_____ No_____ If yes, which institution?
      Name_____ Location_____

3. We can better serve students if we have their suggestions regarding our services. Please tell us what Arkansas State University could have done that would have caused you to enroll. _____
   _____
   _____
   _____

4. Please write (Dr. Jimmy McCluskey, Vice-President for Student Affairs, Arkansas State University, State University, Arkansas 72467) or call (501-972-2048) if we may be of service to you now or in the future. Thank you.